

REMARKS

Claims 1 to 15 and 16 to 20 are pending in the application, of which claims 1 to 7 have been allowed. Of the non-allowed claims, claims 8, 12 and 14 are independent. Favorable reconsideration and further examination are respectfully requested.

Initially, Applicant thanks the Examiner for the indication that claims 1 to 7 are allowable, and for the indication that claim 10 contains allowable subject matter. Applicant, however, has not incorporated the subject matter of claim 10 into its base claim 8 because Applicant believes claim 8 to be allowable for at least the reasons set forth below.

Regarding the numerous references noted at the top of page 2 of the Office Action, Applicant notes that those references were cited in an Information Disclosure Statement (IDS) filed on April 7, 2003, a copy of which is enclosed. Applicant also submits herewith a copy of a PTO-stamped postcard confirming receipt of the IDS and references. Accordingly, consideration thereof is respectfully requested. In view of the enclosed submissions, no fee is believed to be required for consideration of the IDS. However, if any fees are due in connection with the IDS, please charge them to Deposit Account No. 06-1050.

The title was objected to for allegedly not being descriptive. Accordingly, Applicant has proposed a new title, approval of which is respectfully requested. Also, claim 16 was objected to; however, that claim has been cancelled, rendering the objection moot.

Turning to the art rejection, claims 8, 9, and 11 to 18 were rejected under 35 U.S.C. §103 over U.S. Patent No. 4,873,626 (Gifford). As shown above, Applicant has amended the claims to define the invention with greater clarity. In view of these clarifications, reconsideration and withdrawal of the art rejection are respectfully requested.

Amended independent claim 8 defines a method of determining whether datapaths in a program should execute a conditional processing block in the program. The method includes storing states of the datapaths, determining whether all the datapaths are disabled, branching around the conditional processing block if all the datapaths are disabled, and executing the conditional processing block if all the datapaths are not disabled. The states of the datapaths are set to stored states of the datapaths following executing the conditional processing block.

The applied Gifford patent is not understood to disclose or to suggest the foregoing features of claim 8. In particular, Gifford is not understood to disclose or to suggest at least storing states of datapaths, and setting states of the datapaths to stored states of the datapaths following executing the conditional processing block.

In this regard, Gifford describes a system that checks whether a first list (called the "A list") is empty. If the first list is not empty, the system enables processing elements indicated by the list to execute code (called "CONSEQUENT code"). Once all of the processing elements indicated on the list have executed the CONSEQUENT code, the first list is cleared. Thereafter, the system checks whether a second list (called the "B list") is empty. If the second list is not empty, the system enables processing elements indicated by the second list to execute code (called "ALTERNATIVE code"). Once all of the processing elements indicated on the second list have executed the ALTERNATIVE code, the second list is cleared.

Thus, while Gifford describes a way of handling conditional processing, Gifford does not describe storing states of datapaths and setting states of the datapaths to stored states following executing the conditional processing block. In this regard, it was said in paragraph 9 of the Office Action that Gifford describes storing PE states. The cited portion of Gifford, namely

column 14, lines 36 to 48, describes storing processed data resulting from an SIMD instruction, not PE states of datapaths as indicated in the Office Action. Base registers 56, which were referenced in the Office Action, do not store PE states, but rather store data that points to regions of memory that contain data for processing elements (see, e.g., column 15, lines 33 to 36).

For at least the foregoing reasons, claim 8 is believed to be patentable. Amended independent claims 12 and 14 each also include storing states of datapaths and setting states of the datapaths to stored states following executing a conditional processing block. Accordingly, these claims are also believed to be patentable over Gifford.

In view of the foregoing amendments and remarks, the entire application is believed to be in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

Applicant's undersigned attorney can be reached at the address shown below. All telephone calls should be directed to the undersigned at 617-521-7896.

No fees are believed to be due for this Amendment, however, if any fees are due, please charge them to deposit account 06-1050, referencing Attorney Docket No. 12407-004001.

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Respectfully submitted,

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